

WHAT IS CLAIMED IS:

1. A parking assistance apparatus for assisting a driver to once stop a vehicle at a predetermined reference position where the driver can view a target parking position in a lateral 5 direction of the vehicle and then to perform parking operation from the reference position to the target parking position, the parking assistance apparatus comprising:

    a camera being installed on the front of the vehicle and configured to capture an image from a side of the vehicle;

10     an image display unit installed in a cabin of the vehicle and configured to display the image captured by the camera; and

15     an image information control unit configured to control image information on the image display unit and to superimpose indicators to guide the vehicle to the reference position on the image.

2. The parking assistance apparatus as claimed in claim 1, further comprising an instruction unit that gives a start 20 instruction of the parking assistance,

    wherein when a start instruction of the parking assistance is given through the instruction unit, the image information control unit superimposes the indicators on the image on the image display unit.

3. The parking assistance apparatus as claimed in claim 2,  
wherein the instruction unit enables the driver to select  
at least one of the left direction and the right direction from  
the vehicle as the direction of the target parking position  
5 and to give a start instruction of parking operation;  
when a start instruction of parking operation on the left  
direction from the vehicle is given through the instruction  
unit, the image information control unit displays an image from  
the left side of the vehicle on the image display unit; and  
10 when a start instruction of parking operation on the right  
direction from the vehicle is given through the instruction  
unit, the image information control unit displays an image from  
the right side of the vehicle on the image display unit.

15 4. The parking assistance apparatus as claimed in claim 1,  
wherein the indicators include a longitudinal direction  
guideline for positioning the vehicle in the longitudinal  
direction thereof and a lateral direction guideline for  
positioning the vehicle in the lateral direction thereof.

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5. The parking assistance apparatus as claimed in claim 4,  
wherein the instruction unit gives a start instruction  
of parking operation when one of parallel parking and back-in  
parking is selected;

25 the lateral direction guideline includes a lateral

direction guideline for parallel parking and a lateral direction guideline for back-in parking;

when a start instruction of parallel parking is given through the instruction unit, the image information control unit superimposes the lateral direction guideline for parallel parking on the image; and

when a start instruction of back-in parking is given through the instruction unit, the image information control unit superimposes the lateral direction guideline for back-in parking on the image.

6. The parking assistance apparatus as claimed in claim 4, wherein the longitudinal direction guideline includes two guidelines spaced from each other at an interval corresponding to the full length of the vehicle; and

when a start instruction of parallel parking is given through the instruction unit, the image information control unit displays the two guidelines on the image.

20 7. The parking assistance apparatus as claimed in claim 4, wherein the longitudinal direction guideline includes two guidelines spaced from each other at the interval corresponding to the full width of the vehicle; and

when a start instruction of back-in parking is given through the instruction unit, the image information control

unit displays the two guidelines on the image.

8. The parking assistance apparatus as claimed in claim 4,  
wherein the image information control unit displays a  
5 mark indicating the vehicle center position at the completion  
of parking on the lateral direction guideline.

9. The parking assistance apparatus as claimed in claim 1,  
wherein the indicator is a mark to schematically indicate  
10 the vehicle position at the completion of parking.

10. A parking assistance method for assisting a driver to  
once stop a vehicle at a predetermined reference position where  
the driver can view a target parking position in a lateral  
15 direction of the vehicle and then to perform parking operation  
from the reference position to the target parking position,  
the parking assistance method comprising:

capturing an image viewed from a side of the vehicle;  
and

20 displaying the image to the driver, while superimposing  
indicators to guide the vehicle to the reference position on  
the image.

11. A vehicle comprising a parking assistance apparatus for  
25 assisting a driver to once stop a vehicle at a predetermined

reference position where the driver can view a target parking position in a lateral direction of the vehicle and then to perform parking operation from the reference position to the target parking position,

5       wherein the parking assistance apparatus includes:

          a camera being installed on the front of the vehicle and configured to capture an image from the side of the vehicle;

          an image display unit configured to display the image captured by the camera to the driver; and

10       an image information control unit configured to control image information on the image display unit and to superimpose indicators to guide the vehicle to the reference position on the image.